



CRABP-I (h2): 293T Lysate: sc-159486

BACKGROUND

The cellular retinoic acid-binding protein (CRABP)-I and a related isoform CRABP-II are nuclear receptors for retinoic acid (RA), an important regulator of cell growth and differentiation in fetal and adult tissues. These CRABP proteins mediate the downstream effects of RA in distinct ways. CRABP-I negatively regulates the activity of RA by enhancing the production of RA-metabolizing enzymes and increasing the rate at which RA is degraded. CRABP-II enhances the effects of RA by directly interacting with RA receptors (RAR) and, in turn, promoting the formation of RAR-RA complexes and stimulating RA-mediated gene transcription. Both CRABP-I and CRABP-II are expressed in the embryo, and CRABP-I is ubiquitously expressed in various adult tissues. The expression of CRABP-II is elevated in cells that synthesize relatively large amounts of RA, and it is also predominantly expressed in skin, uterus, ovary and in the choroid plexus.

REFERENCES

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2. Giguere, V., et al. 1990. Molecular cloning of cDNA encoding a second cellular retinoic acid-binding protein. *Proc. Natl. Acad. Sci. USA* 87: 6233-6237.
3. Boylan, J.F. and Gudas, L.J. 1992. The level of CRABP-I expression influences the amounts and types of all-*trans*-retinoic acid metabolites in F9 teratocarcinoma stem cells. *J. Biol. Chem.* 267: 21486-21491.
4. Gorry, P., et al. 1994. The cellular retinoic acid binding protein I is dispensable. *Proc. Natl. Acad. Sci. USA* 91: 9032-9036.
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6. Zheng, W.L., et al. 1996. Localization of cellular retinoic acid-binding protein (CRABP) II and CRABP in developing rat testis. *Endocrinology* 137: 5028-5035.
7. Dong, D., et al. 1999. Distinct roles for cellular retinoic acid-binding proteins I and II in regulating signaling by retinoic acid. *J. Biol. Chem.* 274: 23695-23698.

CHROMOSOMAL LOCATION

Genetic locus: CRABP1 (human) mapping to 15q25.1.

PRODUCT

CRABP-I (h2): 293T Lysate represents a lysate of human CRABP-I transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

CRABP-I (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive CRABP-I antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.